

ISIS - Feature #2353

spiceinit fails on Dawn images with new frames kernel dawn_v13.tf

2015-10-23 03:43 PM - Kris Becker

Status:	Closed	Software Version:
Priority:	High	
Assignee:	Kristin Berry	
Category:	Infrastructure	
Target version:	N/A	
Impact:	New versions of a dynamic CK that is required for newer DAWN images are now automatically downloaded and added to the appropriate ISIS kernels area as they become available. Additionally, a category test which is run nightly was added to catch these kinds of problems quickly.	
Description		
spiceinit fails to complete successfully with the following error:		
Error = "The ck rotation from frame -203120 can not be found due to no pointing available at requested time or a problem with the frame"		
This problem been traced to changes made in the newly released Dawn frames kernel, dawn_v13.tf. This new kernel has redefined the DAWN_FC2 alignment from a fixed frame relative to the spacecraft to a dynamic CK-based frame for both the Vesta and Ceres encounters.		
A solution has been found that appears to fix the problem by adding an additional specific CK frame called dawn_fc_v1.bc that contains these new frames. See the comments in \$ISIS3DATA/dawn/kernels/fk/dawn_v13.tf for additional information.		
We will add an ISIS regression test to catch these kinds of problems when they arise for changes in Dawn kernels.		

History

#1 - 2015-10-23 03:45 PM - Stuart Sides

- Tracker changed from Bug to Feature
- Status changed from New to Assigned
- Assignee set to Kristin Berry

#2 - 2015-10-23 03:47 PM - Kris Becker

- Tracker changed from Feature to Bug
- Status changed from Assigned to New
- Assignee deleted (Kristin Berry)

The thread in ISIS Support that is related is found in <http://isis.astrogeology.usgs.gov/IsisSupport/index.php/board.15.0.html>.

#3 - 2015-10-23 03:50 PM - Kristin Berry

- Tracker changed from Bug to Feature
- Status changed from New to In Progress
- Assignee set to Kristin Berry

#4 - 2015-10-26 12:12 PM - Kristin Berry

- Impact updated

#5 - 2015-11-03 04:30 PM - Kristin Berry

To test:

```
cd /work/projects/isis/latest/m02353/isis/src/dawn/tsts/dawn
setisis /work/users/kberry/NH-merge-trunk/isis
make test
```

My actual cattest is in /work/projects/isis/latest/m02353/isis/src/dawn/tsts/dawn, but everything needed to make it work is in the LEISASmile (new horizons) branch of Isis, which I merged with trunk at /work/users/kberry/NH-merge-trunk/isis . Assuming all goes well, I will wait to check in the code for this ticket until after I have checked in my merge of New Horizons into trunk.

#6 - 2015-11-03 04:30 PM - Kristin Berry

- Status changed from *In Progress* to *Resolved*

#7 - 2015-11-04 11:48 AM - Kris Becker

- Status changed from *Resolved* to *Closed*

Thanks, Kristin.